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ABSTRACT

This report prepared in cooperation with the President's Council on Physical Fitness, presents data on some aspects of the physical activity programs in public and private elementary and secondary schools and the use of standardized tests of physical achievement as part of the schools' overall appraisal of the physical fitness of their pupils. It also provides data on the test results of the pupils in schools having such testing programs. The scope of this study is limited to the extent to which schools have implemented the basic recommendations of the President's Council on Physical Fitness. These recommendations focus on health appraisals and on physical activity and testing programs in schools. Such programs are designed to contribute to the development of strength, endurance, flexibility, and other physical qualities necessary for good health and better living. Nearly all schools were found to provide physical education programs at some grade level and 48% of the schools were found to use a standardized test to measure selected physical abilities of some of their students. (Author/SK)

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PHYSICAL ACHIEVEMENT and the SCHOOLS

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HIGHLIGHTS

♦ Nearly all schools provide physical education programs at some grade level, but only 4 schools in 10 provide such programs as frequently as 5 days a week.

♦ Forty-eight percent of the Nation's schools are now using some type of standardized test to evaluate selected physical abilities of at least some of their pupils.

♦ Twenty-one percent of the schools administered a three-item test of physical achievement during the school year 1963–64 in order to identify their physically underdeveloped pupils. Of the pupils to whom the test was administered, about 70 percent, both boys and girls, were able to pass.

♦ Twenty-three percent of the schools administered a more rigorous test of physical achievement—the AAHPER seven-item test. On this test, only 57 percent of the boys and 51 percent of the girls were reported to have scored "satisfactory" on all items.

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PHYSICAL ACHIEVEMENT and the SCHOOLS

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FOREWORD

Since President John F. Kennedy appointed his Council on Physical Fitness in 1961, much has been done to increase public awareness of the importance of physical fitness as the basis of other forms of excellence. A nationwide campaign through newspapers, the production of films for use on television, and the publication by the President's Council of *Youth Physical Fitness* have stimulated public concern about physical development as part of the all-around development of the Nation's youth. Under President Johnson, emphasis on the importance of the physical well-being of young people has continued.

This bulletin reports the results of a survey designed to obtain information on the status of physical development programs in elementary and secondary schools, both public and private, and the physical achievement of the pupils as measured by objective tests. Despite the existence of many fine comprehensive health education and physical education programs, a continuing effort is needed to strengthen the programs in many schools to provide all pupils with the opportunity to make and keep themselves physically fit.

The authors wish to express their appreciation to Simon A. McNeely of the President's Council on Physical Fitness and to Elsa Schneider, of the Office of Education for many helpful suggestions regarding the interpretation of the results of the study.

Ralph C. M. Flynt,
Associate Commissioner
for Educational Research and Development.

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PREFACE

In broad terms, the goal of the President's Council on Physical Fitness is to improve the health and physical fitness of all Americans. Specifically, it urges all schools to strive for quality physical education programs emphasizing physical fitness. It also urges all Americans—young and old—to make regular exercise, participation in sports and games, and good health care a part of their way of life.

The program is not based on a desire to develop more athletes; rather, it is based on the need to develop more men and women capable of utilizing fully their opportunities for education, recreation, and creative work.

The Council, in cooperation with 19 leading education and medical groups, has developed extensive program suggestions and recommendations. These have been distributed to all of the Nation's schools, and they have been interpreted and explained in a series of clinics and conferences. The Council also has made available to the schools and colleges, health agencies, and recreation groups some 4,000 prints of 6 instructional and motivational films.

Not only has the active support of individual citizens, civic groups, professional associations, voluntary organizations, private enterprise, and other groups been enlisted, but large businesses have also been contacted in an effort to establish more and better employee recreation programs. All communities have been urged to use their public schools as neighborhood recreation centers, opening the facilities to the public on evenings and weekends and during the summer months.

Although this is a good beginning, much remains to be done. There is no equality of opportunity—in education, in employment, or in any phase of life—for the youngster who is lethargic and weak, timid and awkward, or lacking in energy and the basic physical skills.

STAN MUSIAL,
Consultant to the President,
on Physical Fitness.

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Introduction

SINCE THE ADVENT of the machine age physical activity has become an increasingly less significant aspect of man's working day. With the tremendous increase in the use of mechanical devices at home, in business, and in industry, the need for physical effort has been reduced to the point where today only a small part of the energy that goes in the Nation's productive work is contributed directly by manpower.

Not only has the adult's workday been affected by the results of technical advances, but the schoolday and the playday of children have been changed as well. Children who formerly walked to school and played actively outdoors now ride to school in buses or the family car and spend long inactive hours watching television. Such sedentary activities adversely affect the physical development of the child. School physical education programs, in addition to having other values, provide opportunities for vigorous exercise to counteract this physical inactivity and to improve physical fitness.

This report, prepared in cooperation with the President's Council on Physical Fitness, presents data on some aspects of the physical activity programs in public and private elementary and secondary schools and the use of standardized tests of physical achievement as part of the schools' overall appraisal of the physical fitness of their pupils. It also provides data on the test results of the pupils in schools having such testing programs.

The scope of this study is limited to the extent to which schools have implemented the basic recommendations of the President's Council on Physical Fitness. These recommendations focus on health appraisals and on physical activity and testing programs in schools. Such programs are designed to contribute to the development of strength, endurance, flexibility, and other physical qualities necessary for good health and better living. Although the Council also recommends administrative provisions for a comprehensive program of health education and physical education, it was not feasible in this survey to study all phases of such a broad program.

Procedures

The report is based on a survey conducted with a representative sample of schools in the spring of 1964. The universe from which the sample was drawn consisted of all school plants housing any span of

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grades between 4 and 12 enumerated by the National Inventory of School Facilities conducted by the Office of Education in the spring of 1962. When more than one school was housed in the same plant, the schools were treated as a single element in the sample. This population was stratified by instructional level (elementary, secondary, and combined elementary and secondary levels), enrollment size,[1] and type of control (public, church-related, and other private). Within each stratum a systematic sample was drawn following a random start.[2]

Questionnaires were mailed to 2,820 school plants on March 19. The intitial mailing and three reminders provided usable questionnaires from 2,507 schools, 92.9 percent of the original sample, by May 19 when data collection was terminated.

Programs of vigorous physical activity

The comprehensive program of health education and physical education proposed by the President's Council on Physical Fitness includes the recommendations that provision be made for all pupils to participate daily in a program of vigorous physical activity. For pupils in grades 1 to 6 this activity period should be at least 30 minutes in length; for pupils in grades 7 to 12 the Council recommends a standard class period.[3] Where this is not feasible, the Council recommends a basic program which permits all students to spend at least 15 minutes per day participating in developmental activities and conditioning exercises designed to build vigor, strength, flexibility, endurance, and balance.[4] Activities of the types proposed require a minimum of equipment or facilities and can be used for both boys and girls in all types of schools. Such regular activity in the schools can help pupils to achieve a higher level of physical development and instill in them an appreciation of physical activity.

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[1] Enrollment-size groups are defined at the end of the appendix tables.

[2] These strata were combined to form the following analytical groupings: *Elementary:* Includes large, medium, and small schools, and public, church-related, and other private schools. *Secondary:* Includes large, medium, and small schools, and public, church-related, and other private schools. *Combined levels:* Includes large, medium, and small schools, and public, church-related, and other private schools. *Small:* Includes elementary, secondary, and combined level schools, and public, church-related, and other private schools. *Medium:* Includes elementary, secondary, and combined level schools, and public, church-related, and other private schools. *Large:* Includes elementary, secondary, and combined level schools, and public, church-related, and other private schools. *Public:* Includes elementary, secondary, and combined level schools, and small, medium, and large schools. *Church-related:* Includes elementary, secondary, and combined level schools, and small, medium, and large schools. *Other private:* Includes elementary, secondary, and combined level schools, and small, medium, and large schools.

[3] This survey was limited to grades 4 to 12.

[4] *Youth Physical Fitness, Suggested Elements of a School-Centered Program,* President's Council on Youth Fitness. Washington: U.S. Government Printing Office, 1961.

This recommended minimum of at least 15 minutes a day of vigorous exercise for all pupils as yet is only partially attained (see table 1). Nearly all schools provide physical education programs at some grade level, but only about 4 schools in 10 provide such programs as frequently as 5 days a week at any grade level. In grades four through eight the median number of days per week with time scheduled for physical activity is a fraction over three, and almost 20 percent have no programs. Physical education is most widespread at the ninth-grade level. During this year of high school the median number of days per week with scheduled programs of physical activity or physical education approaches four, and only about 3 percent of the schools are without physical education classes. In the past, there has been less emphasis on planned programs of physical activity in the last 2 years of high school. However, the results of this survey indicate some increase in the median number of days per week when time is devoted to physical activities and a rather sharp decline in the proportion of schools reporting no programs. Schools of all types tend to schedule slightly more time for boys than for girls.

Small schools are less likely than large schools to provide programs of physical education, but where such programs are provided small schools are more likely than others to schedule activity periods for 5 days a week. Non-church-related private schools are more likely than either the public schools or church-related schools to offer programs of physical education for boys and also more likely to schedule boys' physical education periods 5 days a week. However, the public schools are much more likely to have such programs for high school girls.

For the most part (85 percent), programs of vigorous physical activities are an integral part of the physical education curriculum (see table 2). In the 1963–64 school year, however, 15 percent of the Nation's schools scheduled periods of 15 minutes or more devoted to physical activities apart from an organized physical education course. It seems likely that this separately scheduled period represents an effort to carry out the recommendations of the President's Council on Physical Fitness in schools which would otherwise have no physical education programs at all. This supposition is supported by the fact that elementary schools, small schools, and church-related schools are least likely to have organized physical education programs; and it is these schools which were more likely than others to report the separate scheduling of time for physical activity.

Overall, about one-half of the respondents reported an increase in the amount of scheduled vigorous physical activity since June of 1961. Even the amount of time given to participation in vigorous physical activities has increased in 44 percent of the schools. Observations of regularly scheduled physical education programs show that instruc-

tion and participation in sports games, rhythms, and other activities are usually preceded and culminated with vigorous warmup and conditioning activities (see table 3).

Tests of physical achievement

Validated tests of physical ability have long been a part of good physical education programs. Tests provide a means of diagnosing weaknesses and measuring achievement. They also motivate pupils to seek improvement. Although there are several nationally used tests, the most widely used test is the AAHPER (American Association for Health, Physical Education, and Recreation) test of physical achievement.

A number of States and many local communities have developed and standardized tests of their own, as well as establishing local norms on national tests.

About one-half (48 percent) of the Nation's schools are now using some type of standardized test to evaluate selected physical abilities of at least some of their pupils (see table 4). Tests are used in more than 9 out of 10 secondary schools, in 3 out of 4 schools with pupil enrollments of 900 or more, and in more than half of the public schools. Testing is less common in the elementary grades, in smaller schools, and in nonpublic schools generally, and is least common in church-related schools.

The three-item screening test

One of the important recommendations made by the President's Council on Physical Fitness relates to the identification and improvement of physically underdeveloped boys and girls. To screen out such children, an easily administered three-item test is suggested. The test consists of (1) pullups (modified for girls), (2) situps, and (3) squat thrusts. These three items are regarded as a test of minimal physical performance, and pupils lacking the strength, flexibility, and agility to pass all three are considered so seriously underdeveloped as to need individualized attention. A normally developed boy of 10 to 13 years of age, for example, should be able to do at least 4 squat thrusts in 10 seconds, 1 pullup, and 14 situps. Developmental and conditioning activities are recommended for those pupils unable to equal or exceed the minimum scores and they should be retested until they are able to pass.

Twenty-one percent of the schools administered this test to pupils in grades 4 through 12 during the school year (see table 5). Its use was more common in schools having secondary grades than in elementary schools, in larger than in smaller schools, and in public than in private schools. The test was used to evaluate the physical performance of 13 percent of the boys and 12 percent of the girls. About 70 percent of the pupils tested, both boys and girls, passed on the first administration of the test. Conversely, 30 percent of the pupils in schools using this test of minimum physical performance were found to be so poorly developed as to require special attention to conditioning and developmental activities.

About one-half of the schools which used the screening test to identify their physically underdeveloped pupils readministered the test after a relatively brief period of conditioning to those pupils who failed on the first administration. Results of this retest showed that 60 percent of the pupils who had originally been unable to meet minimum standards of physical performance had improved sufficiently to achieve passing scores. When results of the first and second tests are combined, the proportion of pupils unable to pass is reduced from 30 to 20 percent.

There is evidence that even this rate of failure can be sharply reduced. For example, in schools which combined elementary and secondary grades, only 5 percent of the boys failed on the second administration of the screening test (see table 5). Continued attention to their physical development could well be expected to help nearly all of the underdeveloped children to attain a minimum level of physical competence and many to more satisfactory levels.

The AAHPER seven-item test

At the time of the survey, 23 percent of the schools reported that they had administered the AAHPER seven-item test during the school year. The test consists of the following items: Pullup (modified for girls), situps, shuttle run, standing broad jump, 50-yard dash, softball throw for distance, and the 600-yard run-walk. Norms for each item of this test have been established for boys and girls at each year of age from 10 to 17. These norms, as adapted by the President's Council on Physical Fitness, are presented in appendix B. A cooperative research grant from the Office of Education has been made for a comparison of youth physical achievement between 1957 and 1964 on norms used in the current AAHPER manuals and more current norms. The grant was made to the University of Michigan; Dr. Paul Hunsicker is director of the study. The testing was done in the spring and was carried on into the fall of 1964 to develop more current norms.

This test battery was administered to about 14 percent of the boys and 12 percent of the girls in grades 4 to 12 (see table 7). Of the pupils taking the test, 57 percent of the boys and 51 percent of the girls were reported to have been scored "satisfactory" (60th percentile or better) on all seven items. Some specialists in physical education feel that it is unlikely that so large a proportion of pupils could have exceeded the 60th percentile on all seven items and more likely that respondents were reporting the number of pupils who performed satisfactorily on each individual item rather than on all items. Nevertheless, it is to be expected that schools with good physical education programs will include the administration of such tests and will produce pupils whose physical development is superior to that of the general school-age population.

Other objective tests

In addition to the schools which administered the AAHPER seven-item test, 25 percent of the schools administered some other objective test of physical achievement. The most widely used tests included the Kraus-Weber, the New York State, the California State, and Marine Corps fitness tests. Tests such as these are in use in about one-half of all high schools, and in from one-fifth to one-fourth of the elementary schools, smaller schools, and private schools.

Schools using these tests administered them to about 25 percent of the boys and to about 20 percent of the girls (see table 8). About 60 percent of these pupils, both boys and girls, were rated satisfactory. There was little or no variation in the proportion of pupils given satisfactory ratings in elementary or secondary schools or in schools of different enrollment sizes, but in church-related schools larger proportions of the pupils tended to score satisfactory than in other private schools or in public schools. In evaluating test results, one should consider several questions: What were the differences in the administration of the test, the understanding of directions, and the standards of acceptable performances? Were the persons responsible for testing provided inservice experiences in standards of testing? Were pupils paired and allowed to score each other? Did classroom teachers or physical education specialists conduct the tests for each pupil? It is generally understood that specialists in physical education are more experienced in evaluating physical performance and tend to require higher standards of acceptable performance.

Summary of testing

Some type of objective test to measure selected or specific aspects of physical fitness was administered to the pupils in about one-half

of the Nation's schools, and about one-half of all pupils—52 percent of the boys and 44 percent of the girls—were given one or more tests of physical development. Ninety-four percent of the secondary schools and 68 percent of the combined elementary-secondary schools are using objective tests of physical achievement. Of those tested, about one-third failed to achieve the desired level of performance (see tables 2, 5, 6, and 9).

Importance of leadership

Although the tests discussed in this report are susceptible of administration by teachers not prepared as physical educators, evidence from the survey indicates the importance of professional leadership for school-centered physical development and testing programs. About one-half of the schools in the Nation have physical education specialists on their faculties: 27 percent of the schools have full-time specialists; 25 percent have specialists who teach the subject part time or serve as consultants to one or more schools of a school district; the remaining 47 percent of the schools are without special physical education teachers (see table 10).

Full-time or part-time instructors are found in more than 9 out of 10 secondary schools, in 8 out of 10 combined level schools and non-church-related private schools, and 5 out of 10 public schools. Fewer than one-half of the elementary schools, small schools, and church-related schools have an instructor available even on a part-time basis. The presence of specialized personnel has important implications for the testing programs of the schools and for test results.

In the first place, most test administration occurred in schools having either full-time or part-time physical education specialists. The AAHPER seven-item test was given in 46 percent of the schools with full-time specialists, in 29 percent of the schools with part-time specialists, but in only 13 percent of the schools without specialists.

Even the more easily administered three-item screening test was less commonly used in schools without instructors. Instructions for administering the test suggest that it should be conducted by pairing pupils of the same sex who test and rate each other requiring only the general supervision of a teacher. This test was administered in nearly one in three of the schools with instructors compared with only one in five of the schools without instructors.

A second influence of physical education instructors appears to be the improved validity of test scores. As we might expect, smaller propor-

tions of pupils passed the seven-item test and the three-item screening test in schools with part-time instructors than in those with full-time instructors; full-time instructors have a greater opportunity to provide a program of supervised physical education. Somewhat surprisingly, however, even larger proportions of pupils were rated satisfactory in schools without physical education instructors. For example, in schools with full-time instructors, 58 percent of the boys were rated satisfactory on the seven-item test; in schools with part-time instructors, 47 percent were rated satisfactory; and in schools without instructors, 65 percent were rated satisfactory. A similar pattern was found for girls. This finding suggests that tests of physical achievement are likely to be more rigorously administered when conducted under the supervision of a physical education instructor than when they are conducted by teachers with other backgrounds (see table 12).

Programs for physically underdeveloped or handicapped pupils

A small, but significant proportion of the schools (12 percent) offers special programs designed to meet the needs of pupils identified as physically underdeveloped according to tests prepared by the President's Council on Physical Fitness (see table 13). Such programs are most common in large secondary schools, and in non-church-related private schools. Among the non-church-related schools where table 13 indicates special programs are most frequently found, 21 percent report programs for the underdeveloped. Usually, only the larger schools have a sufficient number of underdeveloped pupils and the qualified instructors to provide a special program. In many cases underdeveloped pupils participate in regularly scheduled physical education classes.

A still smaller fraction of schools (6 percent) provides special programs for the physically handicapped. Many such pupils, however, are educated in special schools for the handicapped, and these schools were excluded from this analysis on the grounds that the testing programs described in this report were not designed for the physically handicapped. Often a special program of this type is infeasible in small- and medium-size schools where the number of handicapped pupils is limited.

Individualized instruction for pupils who are physically underdeveloped or handicapped can be provided during regular physical

education classes. The importance of including all pupils with challenging activities within their physical capacities cannot be overemphasized.

Medical examinations

The ability to perform satisfactorily on tests of physical fitness is not alone sufficient evidence of good health. School health programs should, therefore, complement the efforts of the home and of other community agencies in the identification of pupils with health problems. As part of the overall health appraisal of their pupils, about three-fourths of the schools in the Nation either require or encourage medical examinations by family physicians or by a physician provided by the schools (see table 14). This practice is most common in secondary schools and in non-church-related private schools (90 percent). The large proportion of private schools reporting medical examinations for their pupils probably reflects the fact that many are residence schools and require that health certificates be submitted with the application for admission.

Conclusions

This survey reveals that although effort is being expended by schools to improve the physical fitness of their pupils, a great deal more needs to be done. Despite the existence of many fine comprehensive programs of health and physical education in the Nation's schools, a large number of schools provide no programs of physical activity. Fewer than 4 out of 10 schools in the Nation provide a daily period of physical education for all pupils. And over 40 percent do not offer opportunity for physical activity even three times per week (see table 1). Physical activity is essential to good health and effective living; yet almost one-third of the school-age population is unable to meet minimum standards of strength, stamina, and agility as measured by a screening test recommended by the President's Council on Physical Fitness, and nearly one-half of the pupils fail to achieve satisfactory scores on more rigorous tests of youth fitness. Experience has shown, however, that the proportion of children who fail the minimum test of physical achievement may be reduced, and steady gains in perform-

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ance on the more extensive tests can be expected when opportunity is provided for regularly scheduled periods of vigorous physical activity.

Since it is vitally important to the Nation that its children be healthy and physically fit—and in view of the value of a sound program of health and physical education in the full development of boys and girls—it seems that schools of all types need further encouragement to extend and improve this aspect of education.

APPENDIXES

Appendix A.—Tables

Appendix B.—Norms for the seven items of the AAHPER youth fitness test

Appendix A.—Tables

Table 1.—Percent distribution of schools with respect to number of days when most pupils usually participate in a planned program of vigorous physical activity; by instructional level, enrollment size, type of control, grade level, and sex: United States, 1963–64

Activity classes per week, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample..	2,507	1,325	621	561	831	930	746	1,159	452	896
	GRADES 4–6									
Program for boys: Total	100	100	100	100	100	100	100	100	100	100
0 days per week	17	18	-------	8	18	17	8	14	8	23
1 day per week	12	12	-------	11	7	18	11	8	6	24
2 days per week	18	18	-------	20	18	15	25	20	10	11
3 days per week	13	13	-------	14	14	11	13	14	12	10
4 days per week	3	3	-------	3	1	5	3	2	19	5
5 days per week	38	37	-------	44	42	32	39	42	46	27
Median number of days per week [2]	3.3	3.2	-------	3.8	3.5	2.9	3.4	3.6	4.8	2.3
Program for girls: Total	100	100	100	100	100	100	100	100	100	100
0 days per week	17	19	-------	9	19	18	9	15	8	25
1 day per week	12	13	-------	11	7	19	11	7	7	24
2 days per week	18	18	-------	20	19	16	25	21	13	12
3 days per week	13	13	-------	13	14	11	13	15	11	8
4 days per week	3	3	-------	3	1	5	3	2	18	4
5 days per week	37	36	-------	45	40	32	39	41	43	26
Median number of days per week [2]	3.2	3.1	-------	3.8	3.4	2.8	3.4	3.5	4.6	2.1
	GRADES 7–8									
Program for boys: Total	100	100	100	100	100	100	100	100	100	100
0 days per week	15	19	1	2	12	18	8	9	6	23
1 day per week	13	15	3	5	7	20	9	5	5	24
2 days per week	18	16	25	24	19	15	25	21	11	13
3 days per week	18	15	34	25	19	17	23	24	8	10
4 days per week	4	4	3	4	5	3	5	3	19	4
5 days per week	33	31	33	40	39	26	29	38	51	25

Note: Footnotes at end of table.

Table 1.—Continued

Activity classes per week, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
	GRADES 7-8—Continued									
Median number of days per week [2]	3.3	3.0	3.6	3.8	3.6	2.8	3.3	3.6	5.0	2.2
Program for girls: Total	100	100	100	100	100	100	100	100	100	100
0 days per week	16	21	2	4	15	19	8	11	7	24
1 day per week	13	16	4	4	6	21	10	5	6	26
2 days per week	20	17	25	30	20	18	29	23	14	15
3 days per week	16	13	33	21	17	14	20	21	13	9
4 days per week	4	4	2	4	3	3	4	4	23	3
5 days per week	32	30	34	38	38	25	28	37	36	23
Median number of days per week [2]	3.1	2.8	3.6	3.6	3.5	2.6	3.1	3.5	4.4	2.0
	GRADE 9									
Program for boys: Total	100	-------	100	100	100	100	100	100	100	100
0 days per week	3	-------	2	4	3	4	3	2	4	9
1 day per week	3	-------	2	2	1	6	3	1	3	18
2 days per week	19	-------	20	18	18	19	24	18	14	26
3 days per week	28	-------	26	30	26	33	24	29	9	17
4 days per week	6	-------	5	5	5	4	11	6	22	3
5 days per week	42	-------	44	42	47	33	35	43	49	27
Median number of days per week [2]	3.9	-------	4.0	3.9	4.5	3.6	3.8	4.0	4.9	2.9
Program for girls: Total	100	-------	100	100	100	100	100	100	100	100
0 days per week	3	-------	2	5	3	4	3	3	5	7
1 day per week	4	-------	3	3	2	7	5	1	5	25
2 days per week	26	-------	25	26	26	26	28	25	22	40
3 days per week	24	-------	25	24	23	29	23	26	13	10
4 days per week	6	-------	6	4	6	4	10	5	29	4
5 days per week	37	-------	39	38	41	31	31	39	27	15
Median number of days per week [2]	3.7	-------	3.8	3.7	3.8	3.5	3.6	3.8	4.2	2.5

Note: Footnotes at end of table.

Table 1.—Continued

Activity classes per week, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
	GRADE 10									
Program for boys: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	7	----	8	7	6	11	5	7	5	9
1 day per week	1	----	2	1	1	2	3	1	4	10
2 days per week	19	----	18	18	18	18	25	18	14	29
3 days per week	29	----	31	25	25	38	29	30	10	20
4 days per week	4	----	5	3	3	3	6	3	17	5
5 days per week	40	----	37	45	47	28	33	41	51	28
Median number of days per week [2]	3.8	----	3.7	3.9	4.1	3.5	3.6	3.8	5.0	3.1
Program for girls: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	8	----	8	9	8	11	4	8	5	8
1 day per week	3	----	3	3	2	3	5	1	5	19
2 days per week	27	----	24	26	28	27	25	25	25	44
3 days per week	24	----	28	19	20	30	29	25	15	13
4 days per week	3	----	5	3	4	2	5	3	24	4
5 days per week	36	----	33	42	40	26	32	38	26	12
Median number of days per week [2]	3.5	----	3.6	3.7	3.7	3.3	3.5	3.6	4.0	2.5
	GRADE 11									
Program for boys: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	15	----	17	14	15	17	7	15	7	18
1 day per week	2	----	3	2	1	4	5	1	3	14
2 days per week	19	----	19	16	18	19	21	18	15	27
3 days per week	21	----	22	20	17	31	28	22	9	14
4 days per week	4	----	4	3	3	4	8	3	15	3
5 days per week	40	----	34	46	47	26	31	40	50	25
Median number of days per week [2]	3.7	----	3.5	3.9	4.0	3.3	3.6	3.7	5.0	2.7
Program for girls: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	17	----	19	18	19	17	9	17	6	21
1 day per week	3	----	4	3	2	5	7	2	6	22
2 days per week	28	----	26	24	29	28	23	27	29	39
3 days per week	18	----	20	14	12	25	27	18	15	7
4 days per week	3	----	4	3	3	2	6	3	22	2
5 days per week	32	----	28	38	35	23	28	34	23	8
Median number of days per week [2]	3.1	----	3.1	3.3	3.0	3.0	3.4	3.3	3.6	2.2

Note: Footnotes at end of table.

Table 1.—Continued

Activity classes per week by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
	GRADE 12									
Program for boys: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	18	----	23	14	18	19	12	18	9	19
1 day per week	2	----	3	2	1	5	5	1	3	15
2 days per week	18	----	18	15	18	17	21	17	16	27
3 days per week	21	----	19	22	16	31	25	22	8	12
4 days per week	4	----	5	3	3	4	7	3	15	3
5 days per week	39	----	33	44	45	25	30	39	49	26
Median number of days per week [2]	3.6	----	3.3	3.9	3.9	3.3	3.5	3.6	4.9	2.7
Program for girls: Total	100	----	100	100	100	100	100	100	100	100
0 days per week	20	----	25	18	21	20	14	20	9	24
1 day per week	4	----	4	4	2	6	8	2	4	20
2 days per week	26	----	21	26	28	26	21	25	29	41
3 days per week	17	----	20	15	13	25	27	19	14	6
4 days per week	3	----	4	2	3	2	6	3	22	2
5 days per week	30	----	26	36	34	22	25	32	22	7
Median number of days per week [2]	3.0	----	3.0	3.2	3.0	3.0	3.3	3.2	3.6	2.2

[1] Enrollment-size groups are defined at end of tables.
[2] Computed before rounding.

Note: Percentages do not necessarily add to 100 because of rounding.

Table 2.—Percent of schools in which programs of vigorous physical activity are part of an organized program of physical education, and percent in which this activity is separately scheduled; by instructional level, enrollment size, and type of control: United States, 1963–64

Scheduling of physical exercise periods	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	2,507	1,325	621	561	831	930	746	1,159	452	896
Total	100	100	100	100	100	100	100	100	100	100
Part of organized program of physical education	85	80	93	88	84	84	93	88	85	75
Separately scheduled	15	20	7	12	16	16	7	12	15	25

[1] Enrollment-size groups are defined at end of tables.

Table 3.—Percent of schools reporting change in the amount of vigorous physical activity scheduled for pupils and change in the amount of time given to participation in vigorous physical activity since 1961; by instructional level, enrollment size, and type of control: United States, 1963–64

Report of change	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools	2,507	1,325	621	561	831	930	746	1,159	452	896
Amount of physical activity:										
Total	100	100	100	100	100	100	100	100	100	100
Increased amount	55	52	64	59	52	55	64	57	42	49
Decreased amount	2	2	1	1	2	1	1	2	----	1
No change	38	39	32	36	38	40	33	36	55	43
Don't know	6	6	4	4	8	4	2	6	3	6
Amount of time:										
Total	100	100	100	100	100	100	100	100	100	100
Increased amount	46	46	46	51	46	47	43	45	34	49
Decreased amount	2	2	1	1	2	2	2	2	1	2
No change	47	48	49	44	46	47	54	48	63	44
Don't know	5	5	3	5	6	4	1	5	2	5

[1] Enrollment-size groups are defined at end of tables.

Note: Percentages do not necessarily add to 100 because of rounding.

Table 4.—Percent of schools administering AAHPER test and percent of schools administering some other objective test of physical fitness to their pupils; by instructional level, enrollment size, and type of control: United States, 1963–64

Administration of test	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	2,507	1,325	621	561	831	930	746	1,159	452	896
Total	100	100	100	100	100	100	100	100	100	100
Administered AAHPER test	23	17	43	34	23	19	34	28	20	9
Administered other objective test	25	20	51	34	23	24	42	30	26	13
No test of physical achievement	52	63	6	32	54	57	24	42	54	78

[1] Enrollment-size groups are defined at end of tables.

Table 5.—Percent of schools using the three-item test to assist in the identification of the physically underdeveloped pupil, the percent of pupils tested, and the percent passed (first test only), by instructional level, enrollment size, and type of control: United States, 1963–64

Use of test, percent tested, and percent passed; by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	1,254	623	397	292	341	521	492	579	194	439
Total	100	100	100	100	100	100	100	100	100	100
Administered	21	19	26	23	18	20	37	23	18	15
Not administered	79	81	74	77	62	80	63	77	82	85
Boys:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	13	11	16	14	11	11	20	15	6	7
Not tested	87	89	84	86	89	89	80	85	94	93
Total	100	100	100	100	100	100	100	100	100	100
Passed	70	63	74	79	68	69	72	71	70	67
Not passed	30	37	26	21	32	31	28	29	30	33
Girls:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	12	10	14	12	10	10	19	14	8	7
Not tested	88	90	86	88	90	90	81	86	92	93
Total	100	100	100	100	100	100	100	100	100	100
Passed	69	62	73	78	64	69	70	69	77	67
Not passed	31	38	27	22	36	31	30	31	23	33

[1] Enrollment size groups are defined at end of tables.

Table 6.—Percent of schools using the three-item screening test which readministered the test to pupils who fail the first test and percent of pupils who passed the second test, and percent who passed either the first or second test; by instructional level, enrollment size, type of control, and sex: United States, 1963–64

Reuse of test, percent retested, percent passed; by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	263	118	103	67	61	104	182	133	34	66
Total	100	100	100	100	100	100	100	100	[2] 100	100
Readministered test	56	58	54	49	49	56	71	57	----	54
Did not readminister test	44	42	46	51	51	44	29	43	----	46
Boys:										
Total	100	100	100	100	100	100	100	100	100	100
Passed second test	61	49	65	71	66	63	52	61	70	57
Did not pass second test	39	51	35	29	34	37	48	39	30	43
Total	100	100	100	100	100	100	100	100	100	100
Passed first or second test	80	69	86	95	81	79	79	81	80	73
Did not pass first or second	20	31	14	5	19	21	21	19	20	27
Girls:										
Total	100	100	100	100	100	100	100	100	100	100
Passed second test	62	54	68	66	64	62	59	62	59	58
Did not pass second test	38	46	32	34	36	38	41	38	41	42
Total	100	100	100	100	100	100	100	100	100	100
Passed first or second test	77	69	81	91	74	78	77	78	80	73
Did not pass first or second	23	31	19	9	26	22	23	22	20	27

[1] Enrollment-size groups are defined at end of tables.
[2] Indicates percents not computed because base is less than 50.

Table 7.—Percent of pupils to whom the AAHPER test of physical fitness was administered and percent satisfactory on all seven items; by instructional level, enrollment size, type of control, and sex: United States, 1963–64

Pupils tested and pupils satisfactory, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Boys:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	14	9	21	16	16	12	18	17	10	4
Not tested	86	91	79	84	84	88	82	83	90	96
Total	100	100	100	100	100	100	100	100	100	100
"Satisfactory" 60 percentile	57	54	58	58	54	59	57	56	58	61
Not satisfactory	43	46	42	42	46	41	43	44	42	39
Girls:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	12	8	18	15	14	10	15	15	12	4
Not tested	88	92	82	85	86	90	85	85	88	96
Total	100	100	100	100	100	100	100	100	100	100
"Satisfactory" 60 percentile	51	52	48	58	46	54	53	51	57	55
Not satisfactory	49	48	52	42	54	46	47	49	43	45

[1] Enrollment-size groups are defined at end of tables.

Table 8.—Percent of pupils to whom an objective test of physical fitness other than the AAHPER seven-item test was administered and percent rated satisfactory; by instructional level, enrollment size, type of control, and sex: United States, 1963–64

Pupils tested and pupils satisfactory, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Boys:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	25	17	37	22	22	21	35	31	27	9
Not tested	75	83	63	78	78	79	65	69	73	91
Total	100	100	100	100	100	100	100	100	100	100
Satisfactory	63	61	64	66	67	61	62	62	60	73
Not satisfactory	37	39	36	34	33	39	38	38	40	27
Girls:										
Total	100	100	100	100	100	100	100	100	100	100
Tested	20	16	27	17	18	17	29	24	13	8
Not tested	80	84	73	83	82	83	71	76	87	92
Total	100	100	100	100	100	100	100	100	100	100
Satisfactory	60	58	62	64	65	58	59	59	71	74
Not satisfactory	40	42	38	36	35	42	41	41	29	26

[1] Enrollment-size groups are defined at end of tables.

Table 9.—Percent of pupils to whom any objective test of physical fitness was administered; by instructional level, enrollment size, type of control, and sex: United States, 1963–64

Test administration, by sex	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Boys:										
Administered an objective test	52	37	74	52	49	44	72	62	43	21
Did not administer an objective test	48	63	26	48	51	56	28	38	57	79
Girls:										
Administered an objective test	44	35	58	44	42	36	63	53	33	18
Did not administer an objective test	56	65	42	56	58	64	37	47	67	82

[1] Enrollment-size groups are defined at end of tables.

Table 10.—Percent of schools having full-time, part-time, and no physical education instructors; by instructional level, enrollment size, and type of control: United States, 1963–64

Staff for physical education	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	2,507	1,325	621	561	831	930	746	1,159	452	896
Total	100	100	100	100	100	100	100	100	100	100
Full-time instructor	27	15	82	53	25	23	54	35	49	7
Part-time instructor	25	26	14	32	22	32	18	20	31	39
No instructor	47	59	4	15	53	45	28	45	20	55

[1] Enrollment-size groups are defined in note at end of tables.

Note: Percentages do not necessarily add to 100 because of rounding.

Table 11.—Percent of schools having full-time, part-time, and no physical education specialists in which the AAHPER seven-item test and the three-item screening test were administered; by instructional level, enrollment size, and type of control: United States, 1963–64

Test administration and staff for physical education	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Administered 7-item test:										
Full-time instructors	46	38	52	47	50	40	47	47	35	29
Part-time instructors	29	28	32	32	39	22	25	37	20	17
No instructors	13	13	-------	21	12	11	26	16	7	7
Administered 3-item test:										
Full-time instructors	32	32	34	32	28	31	43	31	30	50
Part-time instructors	28	28	27	35	28	27	42	29	23	27
No instructors	18	17	-------	31	16	14	45	24	17	6

[1] Enrollment-size groups are defined at end of tables.

Table 12.—Percent of pupils satisfactory on the AAHPER seven-item test and passing the three-item screening test in schools having full-time, part-time, and no physical education instructors; by instructional level, enrollment size, type of control, and sex: United States, 1963–64

Rating on test; by sex and staff for physical education	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Satisfactory 7-item test										
Boys:										
Full-time instructors	58	56	59	55	57	59	56	57	60	70
Part-time instructors	47	45	53	59	35	57	53	43	46	63
No instructors	65	61	-------	89	81	53	76	69	-------	51
Girls:										
Full-time instructors	51	55	49	55	47	54	50	50	58	68
Part-time instructors	44	41	48	61	35	52	54	42	71	55
No instructors	64	60	-------	89	79	52	74	68	-------	50
Passed three-item test										
Boys:										
Full-time instructors	72	59	74	79	70	72	72	71	68	79
Part-time instructors	59	57	58	74	51	63	59	58	84	61
No instructors	75	73	-------	91	90	67	79	76	71	71
Girls:										
Full-time instructors	70	57	73	76	68	73	69	70	74	79
Part-time instructors	57	54	57	78	49	62	57	55	62	60
No instructors	75	73	-------	87	75	71	81	74	83	77

[1] Enrollment-size groups are defined at end of tables.

Table 13.—Percent of schools having a special or adapted physical fitness program designed specifically to meet the needs of pupils identified as physically underdeveloped or physically handicapped; by instructional level, enrollment size, and type of control: United States, 1963–64

Program	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	2,507	1,325	621	561	831	930	746	1,159	452	896
Total	100	100	100	100	100	100	100	100	100	100
Special program for the physically underdeveloped	12	10	18	17	12	11	18	14	21	6
No special program for the physically underdeveloped	88	90	82	83	88	89	82	86	79	94
Total	100	100	100	100	100	100	100	100	100	100
Special program for the physically handicapped	6	5	8	6	6	4	12	7	8	2
No special program for the physically handicapped	94	95	92	94	94	96	88	93	92	98

[1] Enrollment-size groups are defined at end of tables.

Table 14.—Percent of schools which require or encourage medical examinations for some or all pupils conducted by the family physician or by a physician provided or arranged for by the school; by instructional level, enrollment size, and type of control: United States, 1963–64

Promotion of medical examinations	All schools	Instructional level			Enrollment size [1]			Type of control		
		Elementary	Secondary	Combined	Small	Medium	Large	Public	Nonpublic	
									Nonchurch-related	Church-related
Number of schools in sample	2,507	1,325	621	561	831	930	746	1,159	452	896
Total	100	100	100	100	100	100	100	100	100	100
Require	41	39	52	43	38	43	45	38	71	47
Encourage	33	35	26	30	32	35	34	34	19	32
Require for some, encourage others	7	4	16	18	7	7	12	8	2	6
Neither	18	22	5	9	23	14	10	20	8	15

[1] Enrollment-size groups are defined at end of tables.

Note: Percentages do not necessarily add to 100 because of rounding.

Appendix B.—Norms for the 7 items of the AAHPER Youth Fitness Test

Sex and rating	Age							
	10	11	12	13	14	15	16	17
	Number of pullups							
Boys:								
Excellent	6	6	7	8	10	10	12	13
Good	3	4	4	5	6	7	9	10
Satisfactory	2	2	2	3	4	5	6	7
Poor	1	1	1	2	2	2	3	4
Girls: [1]								
Excellent	45	45	45	45	45	45	45	45
Good	40	40	40	40	40	40	40	40
Satisfactory	30	30	29	30	29	22	25	25
Poor	17	20	20	20	19	12	14	15
	Number of situps							
Boys:								
Excellent	60	67	78	73	90	99	99	99
Good	47	50	51	54	60	60	73	63
Satisfactory	30	31	37	40	44	45	50	50
Poor	22	23	28	30	33	35	40	38
Girls:								
Excellent	50	50	50	50	49	37	40	42
Good	33	34	30	30	28	26	27	25
Satisfactory	22	25	22	21	20	20	21	20
Poor	15	18	17	17	15	15	16	15
	Softball throw for distance (in feet)							
Boys:								
Excellent	122	130	151	171	190	207	214	231
Good	103	115	132	148	163	182	190	212
Satisfactory	92	103	118	129	147	164	172	185
Poor	82	94	102	115	131	150	156	167
Girls:								
Excellent	69	88	94	106	112	117	120	120
Good	56	68	78	88	89	94	99	102
Satisfactory	45	56	65	75	75	80	84	86
Poor	38	48	55	63	64	67	71	72
	600-yard run-walk (minutes and seconds)							
Boys:								
Excellent	2:15	2:2	2:5	2:0	1:50	1:43	1:40	1:36
Good	2:30	2:24	2:19	2:13	2:5	1:59	1:51	1:51
Satisfactory	2:45	2:37	2:32	2:25	2:18	2:9	2:0	2:0
Poor	2:58	2:50	2:46	2:36	2:30	2:20	2:10	2:9
Girls:								
Excellent	2:30	2:25	2:22	2:24	2:20	2:27	2:23	2:30
Good	2:49	2:44	2:41	2:43	2:45	3:5	2:48	2:47
Satisfactory	3:6	3:1	3:3	3:0	3:5	3:6	3:5	3:4
Poor	3:21	3:16	3:21	3:20	3:21	3:24	3:23	3:19

Note: Footnote at end of table.

Appendix B.—Norms for the 7 items of the AAHPER Youth Fitness Test—Continued

Sex and rating	Age							
	10	11	12	13	14	15	16	17
	Shuttle run: time in seconds							
Boys:								
Excellent	10.3	10.4	10.0	9.7	9.4	9.3	9.1	9.0
Good	11.2	11.0	10.5	10.3	10.0	10.0	9.5	9.5
Satisfactory	11.9	11.6	11.1	10.8	10.5	10.4	10.0	10.0
Poor	12.3	12.0	11.7	11.5	11.0	10.9	10.5	10.6
Girls:								
Excellent	11.2	10.9	10.4	10.7	10.5	10.5	10.3	10.4
Good	11.8	11.6	11.3	11.3	11.2	11.0	11.0	10.8
Satisfactory	12.4	12.2	12.0	12.0	11.8	11.8	11.5	11.5
Poor	13.1	12.9	12.6	12.4	12.5	12.3	12.0	12.1

	Standing broad jump													
Boys:	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
Excellent	5	6	5	10	6	2	6	8	7	2	7	8	8	0	8	4
Good	5	0	5	4	5	8	6	0	6	7	7	0	7	3	7	8
Satisfactory	4	8	5	0	5	4	5	8	6	1	6	5	6	11	7	2
Poor	4	4	4	7	4	11	5	2	5	7	5	11	6	4	6	8
Girls:														
Excellent	5	4	5	7	5	8	5	9	6	0	6	2	6	5	6	6
Good	4	10	5	0	5	2	5	4	5	6	5	6	5	8	5	10
Satisfactory	4	5	4	8	4	9	4	11	5	0	5	0	5	2	5	3
Poor	4	1	4	3	4	5	4	6	4	7	4	8	4	10	4	10

	50-yard dash (in seconds)							
Boys:								
Excellent	7.6	7.3	7.0	6.5	6.5	6.2	6.1	6.0
Good	8.1	7.9	7.5	7.2	7.0	6.7	6.4	6.3
Satisfactory	8.6	8.3	8.0	7.6	7.3	7.0	6.8	6.6
Poor	9.0	8.7	8.3	8.0	7.7	7.3	7.0	7.0
Girls:								
Excellent	8.0	7.5	7.2	7.4	7.3	7.4	7.1	7.3
Good	8.5	8.2	8.0	7.9	8.0	8.0	7.7	8.0
Satisfactory	8.9	8.6	8.4	8.2	8.3	8.3	8.2	8.4
Poor	9.5	9.0	9.0	8.8	8.8	8.9	8.6	8.9

[1] Test modified for girls.

ENROLLMENT-SIZE GROUPS

	Public	Nonpublic
Elementary:		
Small	1–349 pupils.	1–349 pupils.
Medium	400–699 pupils.	350–699 pupils.
Large	700 and more pupils.	700 and more pupils.
Secondary:		
Small	1–799 pupils.	1–499 pupils.
Medium	800–1399 pupils.	500–899 pupils.
Large	1400 and more pupils.	900 and more pupils.
Combined Elementary-Secondary:		
Small	1–499 pupils.	1–399 pupils.
Medium	500–899 pupils.	400–799.
Large	900 and more pupils	800 and more pupils.

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